

Claims

What is claimed is:

1. An electrical outlet box comprising in combination:
 - (a). a rear wall, a top wall, a bottom wall, and two identical side walls that extend outwardly from the rear wall, with said rear wall being normal to all other walls, and said identical side walls being parallel to each other with said top and bottom walls also being parallel, to thereby define an open enclosure;
 - (b). an electrical device, having one or more outlets, positioned within said enclosure and said device carrying thereon at least two prepared solid conductors for making electrical connections according to common polarity;
 - (c). at least one sheathed electrical cable entering the enclosure via a preformed aperture within at least one of said walls, said cable also having a plurality of prepared solid conductors for making electrical connections according to polarity;
 - (d). a multiplicity of terminal blocks for establishing reliable electrical connection between said electrical device conductors and said cable conductors, said blocks being positioned within and mounted to at least one wall of said enclosure by mounting means;
 - (e). each terminal block having a substantially rectangular shape that carries thereon first and second receiving apertures having a common polarity, the first aperture adapted for acceptance of a manually inserted conductor of said cable and the second aperture adapted for receiving a manually inserted conductor of the electrical device;
 - (f). each terminal block also having a body cavity formed therein for containing an aligned gripping means associated with first and second

receiving apertures for grasping and electrically connecting the inserted cable and electrical device conductors;

(g). each terminal block also bearing upon its exterior surface at least one releasing means associated with said first and second receiving apertures for selective release and disconnection of conductors of step (f);

(h). said releasing means adapted for manual insertion of a depression tool into said terminal block to release said gripping means to thereby allow manual removal of cable and electrical device conductors;

(i). an apertured faceplate for closing said open enclosure and protecting contents of said enclosure including said conductors, terminal blocks, and electrical device; and

(j). said apertures within said faceplate being dimensioned and shaped to accommodate electrical connection between said electrical device housed within the enclosure and an external electrical appliance by means of an electrical plug piercing outlets of said electrical device.

2. The electrical outlet box of Claim 1 wherein the mounting means are selected from the group consisting of ears, tabs, rails, bosses, studs, rivets, screws, and molded design elements.

3. The electrical outlet box of Claim 1 wherein electrical devices are selected from the group consisting essentially of receptacles, sockets, switches, and electrical fixtures.

4. The electrical outlet box of Claim 3 wherein electrical fixtures are selected from the group consisting essentially of phone jacks, computer jacks, cable television terminals, local area network jacks, and their combinations.

5. The electrical outlet box of Claim 1 wherein the depression tool is selected from the group consisting essentially of an awl, screw driver, and a pointed tool.

6. The electrical outlet box of Claim 1 wherein said substantially rectangular shape comprises rectangular, cylindrical, and tubular forms.

7. The electrical outlet box of Claim 1 wherein said gripping means comprises a metal spring set including a smaller, L-shaped base spring and a larger, L-shaped flex spring.

8. The L-shaped flex spring of Claim 7 that has been processed to be more resilient by a method selected from the group consisting essentially of scoring, slotting, notching, or perforating.

9. The electrical outlet box of Claim 1 wherein said receiving means is an aperture formed within said terminal blocks by a conventional process selected from drilling and molding.

10. A method of wiring an electrical outlet box comprising the steps of:

(a). providing an electrical outlet box of Claim 1 having a plurality of terminal blocks;

(b). introducing at least one sheathed cable to said outlet box through an aperture preformed within said box;

(c). removing sheathing from said cable to expose a plurality of insulated solid conductors;

(d). stripping insulation from said conductor to provide a bare conductor tip;

- (e). matching the bare conductor tip according to polarity to a terminal block of the outlet box having a corresponding polarity;
- (f). inserting said bare conductor tip through a receiving means carried on an exterior surface of said terminal block until a grasping means of the terminal block is engaged;
- (g). energizing said box by connection of said cable to an external power source;
- (h). positioning an electrical device, having a plurality of outlets, in said box having a multiplicity of bare conductor tips thereon according to polarity between a plurality of terminal blocks and said device;
- (i). placing a faceplate over said box and thereby covering said box, device, and conductors to reduce access and to minimize introduction of particulates and moisture; and
- (j). establishing electrical connection between said box and an external electrical appliance by means of plug insertion of said electrical appliance into said outlet of said electrical device.